

# Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

## SM/J

RRID:IMSR\_JAX:000687

Type: Organism

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### Proper Citation

RRID:IMSR\_JAX:000687

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### Organism Information

**URL:** <https://www.jax.org/strain/000687>

**Proper Citation:** RRID:IMSR\_JAX:000687

**Description:** Mus musculus with name SM/J from IMSR.

**Species:** Mus musculus

**Synonyms:** small

**Notes:** gene symbol note: hemoglobin beta chain complex|beta-2 microglobulin|8-oxoguanine DNA-glycosylase 1|interleukin 3 receptor; alpha chain|neuraminidase 1|G protein-coupled receptor 84; inbred strain: Hbb|B2m|Ogg1|Il3ra|Neu1|Gpr84

**Affected Gene:** hemoglobin beta chain complex|beta-2 microglobulin|8-oxoguanine DNA-glycosylase 1|interleukin 3 receptor; alpha chain|neuraminidase 1|G protein-coupled receptor 84

**Genomic Alteration:** single|a variant|mutation 1|deletion

**Catalog Number:** JAX:000687

**Database:** JAX Mice and Services

**Database Abbreviation:** JAX

**Availability:** embryo

**Organism Name:** SM/J

**Record Creation Time:** 20250513T053620+0000

**Record Last Update:** 20260808T050823+0000

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### Ratings and Alerts

No rating or validation information has been found for SM/J.

No alerts have been found for SM/J.

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## Data and Source Information

**Source:** [Integrated Animals](#)

**Source Database:** JAX Mice and Services

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## Usage and Citation Metrics

We found 86 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [SPARC SAWG](#) .

Novais EJ, et al. (2026) Dasatinib and quercetin senolytic treatment delays early onset intervertebral disc degeneration in SM/J mice. Bone research, 14(1).

Zhang W, et al. (2026) PTH induced osteoblast Slit3 to decrease aberrant sensory innervation in degenerated vertebral endplates to relieve low back pain in mice. Bone research, 14(1), 12.

Risbud M, et al. (2025) Dasatinib and quercetin senolytic treatment delays early onset intervertebral disc degeneration in SM/J mice. Research square.

Qu F, et al. (2025) Digit regeneration is expedited in LG/J healer mice compared to SM/J non-healer mice. NPJ Regenerative medicine, 10(1), 11.

Novais EJ, et al. (2025) Genetics- and age-driven neuroimmune and disc changes underscore herniation susceptibility and pain-associated behaviors in SM/J mice. Science advances, 11(17), eado6847.

Ren W, et al. (2025) A tandem repeat atlas for the genome of inbred mouse strains: A genetic variation resource. iScience, 28(11), 113703.

Hayakawa K, et al. (2024) B-1 derived anti-Thy-1 B cells in old aged mice develop lymphoma/leukemia with high expression of CD11b and Hamp2 that different from TCL1 transgenic mice. Immunity & ageing : I & A, 21(1), 22.

Crane J, et al. (2024) Slit3 by PTH-Induced Osteoblast Secretion Repels Sensory Innervation in Spine Porous Endplates to Relieve Low Back Pain. Research square.

Miranda MA, et al. (2023) Integrated transcriptomics contrasts fatty acid metabolism with hypoxia response in  $\beta$ -cell subpopulations associated with glycemic control. BMC genomics, 24(1), 156.

Durán A, et al. (2023) A Mouse Systems Genetics Approach Reveals Common and Uncommon Genetic Modifiers of Hepatic Lysosomal Enzyme Activities and Glycosphingolipids. International journal of molecular sciences, 24(5).

Oestereich MA, et al. (2023) Comprehensive ECG reference intervals in C57BL/6N substrains provide a generalizable guide for cardiac electrophysiology studies in mice. *Mammalian genome : official journal of the International Mammalian Genome Society*, 34(2), 180.

Khan AH, et al. (2023) Genetic pathways regulating the longitudinal acquisition of cocaine self-administration in a panel of inbred and recombinant inbred mice. *Cell reports*, 42(8), 112856.

St Pierre CL, et al. (2022) Genetic, epigenetic, and environmental mechanisms govern allele-specific gene expression. *Genome research*, 32(6), 1042.

Macias-Velasco JF, et al. (2022) Parent-of-origin effects propagate through networks to shape metabolic traits. *eLife*, 11.

Liang T, et al. (2022) Constructing intervertebral disc degeneration animal model: A review of current models. *Frontiers in surgery*, 9, 1089244.

Sheppard K, et al. (2022) Stride-level analysis of mouse open field behavior using deep-learning-based pose estimation. *Cell reports*, 38(2), 110231.

Tyler AL, et al. (2021) Effects of kinship correction on inflation of genetic interaction statistics in commonly used mouse populations. *G3 (Bethesda, Md.)*, 11(7).

Seemiller LR, et al. (2021) Genetic background determines behavioral responses during fear conditioning. *Neurobiology of learning and memory*, 184, 107501.

Zeid D, et al. (2021) Terc Gene Cluster Variants Predict Liver Telomere Length in Mice. *Cells*, 10(10).

Durán A, et al. (2021) Identification of genetic modifiers of murine hepatic  $\beta$ -glucocerebrosidase activity. *Biochemistry and biophysics reports*, 28, 101105.